the group consisting of alkylating agents, antitumor antibiotics, antimetabolites, biological agents, hormonal agents, nitrogen mustard derivatives and plant alkaloids.

#### **REMARKS**

With the cancellation of claims 17, 20, 21, 35, 38 and 39, claims 1-16, 18, 19, 22-34, 36, 37 and 40-75 are pending.

The amendments are supported by the specification at page 16, lines 13-24; page 17, lines 1-12 and 32-33; page 18, lines 1, 2, 20-24 and 29-34; page 19, lines 21-28; and page 20, lines 5-10.

The definition of  $G_2$  in claims 1 and 27 has been amended to delete non-elected subject matter, and not for any rejection. The definitions of  $A_1$ ,  $A_2$ ,  $A_3$  and  $A_4$  have been amended in claims 1 and 27 to more specifically recite that the Markush group alternatives O, S and N fulfill the valence requirements. Applicant submits that the amendments to  $A_1$ ,  $A_2$ ,  $A_3$  and  $A_4$  fail to narrow the scope of the amended recitations because it would have been clear to a person skilled in the art that O, S and N under  $A_1$ ,  $A_2$ ,  $A_3$  and  $A_4$  in claims 1 and 27 as filed must fulfill the valence requirements. The amendment to make O, S and N atoms fulfill proper valence requirements is inherently supported by the person's knowledge that the O, S and N atoms must fulfill the valence requirements in chemistry.

The amendments to claims 4 and 6 fail to narrow the scope of the amended claim recitations because it would have been clear to a person skilled in the art that N under  $A_1$  or  $A_2$  must fulfill the valence requirement, so it was intended to be NH. The

replacement of N with NH is inherently supported by the person's knowledge that the N atoms must fulfill the valence requirement in chemistry.

The replacement of "with" with "and" in claims 74 and 75 will not narrow the scope of the amended claim recitation because the change was cosmetic.

The other amendments to the claims replace "selected from the group comprising" with "selected from the group consisting of" in order to follow proper Markush language. These amendments fail to narrow the scope of the amended claim recitations because a person skilled in the art would have known that, in the claims as filed, "selected from the group comprising" was intended to be "selected from the group consisting of".

### Restriction Requirement

Applicant confirms the election with traverse of Group VII, wherein G2 is non-heterocycle and X is oxygen or sulfur. The non-elected subject matter has been deleted.

#### Claim Rejections -- 35 U.S.C. 112

Claims 1-19, 22-37 and 40-75 were rejected as indefinite because of improper Markush groupings. The language "selected from the group comprising" has been replaced with "selected from the group consisting of" to present proper Markush groupings.

Claims 1 and 27 were also rejected as indefinite because of "incomplete" molecules due to dangling valences on certain oxygen, sulfur and nitrogen atoms.

Applicants respectfully disagree because a person skilled in the art would have known that the O, S and N atoms must fulfill the valence requirements so, if needed, a H atom is attached to meet the proper valence.

Claims 74 and 75 were rejected as unclear whether they were drawn to a method of use or a product. Applicants respectfully traverse the rejection because the preambles of claims 74 and 75 clearly state "A combination", so a person skilled in the art would have known that claims 74 and 75 as filed were directed to a **product** useful for the treatment of cancer, wherein the product comprises at least one compound of claim 1 and another anticancer agent or antiangiogenic agent. The mere recitation of the intended use of the "combination" in the preambles does not convert the product claims to method of use claims.

Withdrawal of the indefinite rejections is requested.

Claims 1-19, 22-37 and 40-75 were rejected as not described in the specification as to enable the making use of the invention due to dangling valences. Applicants respectfully traverse the rejection. It would have been apparent to a person skilled in the art that the valences on the O, S and N atoms were really not dangling because the person would have known that the O, S and N atoms must fulfill the valence requirements in chemistry, thus if needed a H atom is attached to the O, S or N atom according to the valence requirements. Therefore, the person would have known how to make the compounds of claim 1 as aided by the disclosure in the specification (e.g. see page 52) supplemented by the knowledge of the art. Withdrawal of the non-enablement rejection is requested.

#### Conclusion

With the above amendments and reasoning, applicant submits that the application is in a condition for allowance. A Notice of Allowance is believed in order.

In the event this paper is not timely filed, Applicant hereby petitions for an appropriate extension of time. The fee for this extension may be charged to Applicant's Deposit Account No. 01-2300.

Please charge any fee deficiency or credit any overpayment to Deposit Account No. 01-2300, referring to client-matter number 108184-00017.

Respectfully submitted,

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Attachments:

Petition for Extension of Time

Marked Up Version of Amendment

## Marked Up Version of Amendment

# 1. (Amended) A compound of the formula:

$$G_2$$
 $A_2$ 
 $G_3$ 
 $A_2$ 
 $G_3$ 
 $G_5$ 
 $G_5$ 

wherein X is selected from the group <u>consisting of</u> [comprising] O and S; wherein  $A_1$  and  $A_2$  are individually selected from the group <u>consisting of</u> [comprising] O, S and [N] <u>NH</u>;

wherein  $G_1$  and  $G_3$  are  $C_{1\text{--}4}$  alkyl chains;

wherein G<sub>5</sub> is a C<sub>0-4</sub> alkyl chain;

wherein  $G_2$  is selected from the group <u>consisting of</u> [comprising]:

$$A_3$$
 $A_4$ 
 $A_4$ 

wherein A<sub>3</sub> and A<sub>4</sub> are individually selected from the group <u>consisting of</u> [comprising]
O, N, [or] <u>and</u> S, <u>wherein the valencies of each O, N, or S are adjusted by adding a H</u>
if <u>needed</u>;

wherein  $G_4$  is a  $C_{5-8}$  aryl, a  $C_{5-8}$  arylsulfonylamino, or an  $C_{5-8}$  arylamino; and wherein  $G_6$  and  $G_7$  are individually selected from the group consisting of [comprising] H, F, Cl, I, Br and a  $C_{1-4}$  alkyl.

4. (Amended) The compound of claim 1, wherein  $A_1$  is [N]  $\underline{NH}$ .

- 6. (Amended) The compound of claim 1, wherein A2 is [N] NH.
- 16. (Amended) The compound of claim 1, wherein G<sub>2</sub> is represented by the formula:

$$A_4$$
  $A_4$  or H,

wherein  $A_3$  is selected from the group <u>consisting of [comprising]</u> O, S and N and  $A_4$  is N <u>and wherein the valencies of each O, N, or S are adjusted by adding a H if needed.</u>

27. (Amended) The compound of claim 1 further represented by the formula:

$$G_2$$
 $N$ 
 $G_1$ 
 $N$ 
 $G_3$ 
 $G_4$ 

wherein X is selected from the group <u>consisting of</u> [comprising] O and S;  $[A_1 \text{ and } A_2 \text{ are individually selected from the group comprising O, S and N;}]$ 

G<sub>1</sub> and G<sub>3</sub> are C<sub>1-4</sub> alkyl chains;

G<sub>2</sub> is selected from the group consisting of [comprising]:

$$A_3$$
 $A_4$ 
 $A_4$ 

wherein  $A_3$  and  $A_4$  are individually selected from the group <u>consisting of</u> [comprising] O, N, [or] <u>and</u> S, <u>wherein the valencies of each O, N, or S are adjusted by adding a H if needed</u> and  $G_8$  is a  $C_{1-4}$  alkyl chain;

wherein  $G_4$  is a  $C_{5-8}$  aryl, a  $C_{5-8}$  arylsulfonylamino, or a  $C_{5-8}$  arylamino; and wherein  $G_6$  and  $G_7$  are individually selected from the group consisting of [comprising] H, F, Cl, I, Br and a  $C_{1-4}$  alkyl.

- 28. (Amended) The compound of claim [26] 27, wherein X is S.
- 29. (Amended) The compound of claim [26] 27, wherein X is O.
- 30. (Amended) The compound of claim [26]  $\underline{27}$ , wherein  $G_1$  is a  $C_1$  alkyl.
- 31. (Amended.) The compound of claim [26]  $\underline{27}$ , wherein  $G_1$  is a  $C_2$  alkyl.
- 32. (Amended) The compound of claim [26] 27, wherein G<sub>3</sub> is a C<sub>1</sub> alkyl.

- 33. (Amended) The compound of claim [26] 27, wherein G<sub>3</sub> is a C<sub>2</sub> alkyl.
- 34. (Amended) The compound of claim [26]  $\underline{27}$ , wherein  $G_2$  is represented by the formula:

$$A_4$$
,  $A_4$  or H,

wherein  $A_3$  is selected from the group <u>consisting of</u> [comprising] 0, S and N and  $A_4$  is N, wherein the valencies of each O, N, or S are adjusted by adding a H if needed.

- 36. (Amended) The compound of claim [26]  $\underline{27}$ , wherein -N-G<sub>2</sub> forms a guanidino containing moiety.
- 37. (Amended) The compound of claim [26] <u>27</u>, wherein -N-G<sub>2</sub> forms a urea containing moiety.
- 40. (Amended) The compound of claim [26]  $\underline{27}$ , wherein  $G_4$  is phenylsulfonylamino.
  - 41. (Amended) The compound of claim [26]  $\underline{27}$ , wherein  $G_4$  is phenyl.

74. (Amended) A combination useful for the treatment of cancer comprising at least one compound of claim 1 and [with] at least one other anticancer agent or antiangiogenic agent.

75. (Amended) A combination useful for the treatment of cancer comprising at least one compound of claim 1 and [with] at least one other anticancer agent selected from the group consisting of alkylating agents, antitumor antibiotics, antimetabolites, biological agents, hormonal agents, nitrogen mustard derivatives and plant alkaloids.